OPINIONS AND DECLARATIONS RENDERED BY THE INTER-NATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E. Secretary to the Commission

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OPINION 397

Validation under the Plenary Powers of the specific name *pruni* Geoffroy, 1762, as published in the combination *Aphis pruni* (Class Insecta, Order Hemiptera)

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INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

COMPOSITION AT THE TIME OF THE ADOPTION OF THE **RULING GIVEN IN OPINION 397**

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Vice-President : Senhor Dr. Afranio do Amaral (Sao Paulo, Brazil) (12th August 1953) Secretary: Mr. Francis Hemming (London, England) (27th July 1948)

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(Arranged in order of precedence by reference to date of election or of most recent re-election as prescribed by the International Congress of Zoology)

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Polaha) (15th June 1950)
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(12th August 1953)
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Oc, Dr. Ferninand PRANTL (Národni Museum y Praze Prague Czechoslovakia) (30th

(27th October 1954)
 Doc. Dr. Ferninand PRANTL (Národni Museum v Praze, Prague, Czechoslovakia) (30th October 1954)
 Professor Dr. Wilhelm KÜHNELT (Zoologisches Institut der Universität, Vienna, Austria)

(6th November 1954)

Professor F. S. BODENHEIMER (The Hebrew University, Jerusalem, Israel) (11th November 1954)

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VALIDATION UNDER THE PLENARY POWERS OF THE SPECIFIC NAME "PRUNI" GEOFFROY, 1762, AS PUBLISHED IN THE COMBINATION "APHIS PRUNI" (CLASS INSECTA, ORDER HEMIPTERA)

RULING :—(1) Under the Plenary Powers (a) the specific name *pruni* Geoffroy, 1762, as published in the combination *Aphis pruni*, is hereby validated, and (b) it is hereby directed that the nominal species so named be interpreted by reference to the description published by Reaumur in 1737 (*Mém. Hist. Ins.* 9(3): 317).

(2) The under-mentioned generic name is hereby placed on the *Official List of Generic Names in Zoology* with the Name No. 988 : *Hyalopterus* Koch, [1854] (gender : masculine) (type species, by selection by Passerini (1860) : *Aphis pruni* Geoffroy, 1762, as validated and interpreted under the Plenary Powers under (1)(a) and (1)(b) above respectively).

(3) The under-mentioned specific name is hereby placed on the *Official List of Specific Names in Zoology* with the Name No. 694 : *pruni* Geoffroy, 1762, as published in the combination *Aphis pruni*, as validated and interpreted under the Plenary Powers under (1)(a) and (1)(b) above respectively (specific name of type species of *Hyalopterus* Koch, [1854]).

(4) The under-mentioned specific name is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name No. 266 :---- pruni Scopoli, 1763, as published in the combination

Aphis pruni (a junior homonym of pruni Geoffroy, 1762, as published in the combination Aphis pruni, as validated under the Plenary Powers under (1) above).

I.—THE STATEMENT OF THE CASE

The question of the validation under the Plenary Powers of the specific name pruni Geoffroy, 1762, as published in the combination Aphis pruni was first brought to the attention of the Office of the Commission by Professor F. C. Hottes (Grand Junction, Colorado, U.S.A.) in a letter dated 7th May 1949. The problem involved, namely the validation of a name in common use which was found to be invalid under the re-definition of Proviso (b) to Article 25 of the Règles adopted by the Thirteenth International Congress of Zoology, Paris, 1948, was one which could not be dealt with by the Commission at the time of the receipt of Professor Hottes's communication, for the Official Record of the decision taken by the Paris Congress had not then been published. This and other decisions on nomenclature taken by the Paris Congress were published in 1950, and as soon as possible thereafter work was started on the formal revision consequent upon certain procedural decisions taken by that Congress of all applications at that time awaiting attention by the Commission. The necessary revision in the present case was completed on 16th June 1951, on which date the following application was submitted by Professor Hottes :---

Proposed use of the Plenary Powers to validate the specific name "pruni" Geoffroy, 1762, as published in the combination "Aphis pruni" (Class Insecta, Order Hemiptera)

By F. C. HOTTES

(Grand Junction, Colorado, U.S.A.)

The present application arises out of the decision taken by the International Commission on Zoological Nomenclature in July 1948

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that Geoffroy in his Histoire abrégée Insectes qui se trouvent aux Environs de Paris, published in 1762, did not consistently apply the principles of binominal nomenclature and therefore that no name published in the foregoing work acquires availability under the Law of Priority in virtue of having been so published (1950, Bull. zool. Nomencl. 4: 366—369) and in particular from Point (2) of that decision where the International Commission agreed to consider separately, Order by Order, any cases where, as the result of the foregoing decision, names in common use were found not to be available and where therefore it was desirable that the Commission should use its Plenary Powers to validate the names in question and so to avoid the confusion and name-changing which would otherwise be unavoidable.

2. Aphid taxonomists are not affected by the foregoing decisions, so far as they relate to generic names. They are, however, very much affected as regards one specific name which was published by Geoffroy in binominal form, although in the work in question he did not apply generally the principles of binominal nomenclature. This name is *Aphis pruni* Geoffroy, 1762 (*Hist. abrég. Ins. Paris* **2**: 497). This name is of importance, because it is the oldest name which unquestionably applies to the Mealy Plum Aphid.

3. Geoffroy did not actually describe the species to which he applied the name *Aphis pruni*, but he gave a reference to Réaumur (1737, *Mém. Hist. Ins.* 9(3): 317) who gave an excellent description of the Mealy Plum Aphid. The name *Aphis pruni* Geoffroy is thus firmly based upon an unquestionable identification.

4. The Mealy Plum Aphid is the type species of the genus Hyalopterus Koch, [1854] (Die Pflanzenläuse-Aphiden 1:16). Aphis pruni Fabricius (an erroneous citation for Aphis pruni Geoffroy, since Fabricius did not publish this as a new name, merely using Geoffroy's name) having been selected as the type species of this genus by Passerini (1860, Gli Afidi (ed. 2) : [27]). (The name Hyalopterus is commonly treated as having been published in 1857, but this is incorrect. Koch's book was published in four Hefte, of which the last was published in 1857 and the first in 1854. The name Hyalopterus occurs in the first Heft and should therefore be dated 1854.)

5. The Mealy Plum Aphid has been known under a large number of different specific names, its nomenclature having been exceptionally unstable. Smith (L.M.), (1936, *Hilgardia* 10(7): 167–209) who applied the name *Hyalopterus pruni* (Geoffroy) to this species, made a careful review of the literature relating to this species, in the introduction

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to which he wrote: "The scientific name of this species has been changed repeatedly; in fact, if each of the following authors is recognised, the status of the name has been changed twenty-one times in the course of which the species has been described eight times as new. This review of the taxonomy does not include many of the lesser notes of an economic nature ,which give *Hyalopterus arundinis* (Fabr.) priority over *H. pruni* (Fabr.) and *vice versa*." It will be immediately evident, therefore, how urgent it is that the name to be applied to this important economic insect should be stabilised without further delay.

6. If the name Aphis pruni Geoffroy, 1762, were not now to be validated by the International Commission under the procedure foreshadowed at its Paris Session, it would be necessary to consider the question of the name Aphis arundinis Fabricius, 1775 (Syst. Ent. : 734). After giving this species the foregoing binominal name in the manner adopted throughout this work (i.e. with the generic name at the head of the page and the specific name in the margin opposite the description), Fabricius referred to this species as Aphis arundinis epigeios, giving its habitat as "Habitat in arundinis epigeios foliis" and completing the description of this species with a short Latin diagnosis. Although in the past this nominal species has frequently been identified with the Mealy Plum Aphid, it is by no means established that this identification is correct. In particular, it must be noted that Fabricius gave Arundo *epigeios* as the host species of *Aphis arundinis* and that this plant, as Börner (1932, Anz. Schädlingsk. 8(8): (8-11) has shown, is a hardleaved sandgrass belonging to the group Agrostideae, which is not at all closely related to the group Festuceae, to which belong the only known alternate host plants of the Mealy Plum Aphid. In spite of repeated search on plants of Calamagrostis epigeios (the currently accepted scientific name of the host species cited by Fabricius). Börner was unable to find the Mealy Plum Aphid on this species. For this reason and because of the nature of the plant, Börner concluded that it was not a host plant for this species. Smith (L.M.) (1936, Hilgardia 10(7): 196-203), after a most careful study of the host plants of this species, concluded (: 201) that Calamagrostis epigeios must be rejected as a host plant of the Mealy Plum Aphid.

7. For so long as any doubt remains regarding the identity of the species represented by the nominal species *Aphis arundinis* Fabricius, 1775, it would be undesirable in the highest degree to allow a situation to arise in which it could be claimed that the specific name *arundinis* Fabricius, 1775, is the oldest available specific name for the Mealy Plum Aphid, for there would always be the danger that later work might show that this name was not applicable to that species and, in consequence, that still another change would need to be made in the name to be used for this species. The extreme importance of providing a stable nomenclature for this species arises not only from the economic

problems involved, wherever this species occurs, but also from its wide distribution. The importance of this latter factor is well brought out in the following passage in which Smith (L.M.), 1936, *loc. cit.* **10**(7): 170–171) has shown how extremely widespread is this species : "*Hyalopterus pruni* (Geoff.) has been frequently reported in many sections of the world, and particularly in the north temperate zone. It has been reported in Africa (Union of South Africa), Australia, Belgium, Canada, China, Denmark, Egypt, England, France, Germany, India, Ireland, Italy, Japan, Java, Latvia, Morocco, New Zealand, Norway, Palestine, Peru, Portugal, Russia, Scotland, Slavonia, Sweden and Switzerland... In the United States this species was first reported from the vicinity of Carmel, California, in 1881. It was reported in Minnesota in 1885. At present it is known to occur in California, Colorado, Connecticut, Illinois, Iowa, Kansas, Maine, Minnesota, Nebraska, Nevada, New Jersey, New York, Ohio, South Dakota and Utah."

8. In view of the economic importance of the Mealy Plum Aphid, it is essential that there should be no room for doubt regarding its correct specific name. The specific name now accepted for this species is pruni Geoffroy, 1762, as published in the combination Aphis pruni, but, as is now clear, that is not an available name, unless the International Commission steps in to make it so, by validating it under its Plenary Powers under the procedure envisaged in Paris in 1948. It is very important that the International Commission should intervene in this way, for confusion extending far outside the limits of systematic zoology would inevitably follow if it were necessary now to discard the specific name pruni Geoffroy, 1762. The risk of confusion and instability is always great when the name of an important economic species is changed for purely technical nomenclatorial reasons (such as those involved in the present instance) but the risk of such confusion and instability is greatly enhanced in the present instance by reason of the fact that, as explained in paragraph 6 above, the next oldest name after *pruni* Geoffroy, 1762, that has to be considered is a name (*arundinis* Fabricius, 1775, published in the binominal combination Aphis arundinis) applied to a species which cannot be identified with certainty with the Mealy Plum Aphid. Thus, if no action were to be taken by the International Commission, finality could not be obtained regarding the correct name to be applied to this species.

9. It is for the purpose of eliminating these dangers and avoiding these uncertainties that the International Commission on Zoological Nomenclature is now asked :---

(1) under the procedure agreed upon by the Thirteenth International Congress of Zoology, Paris, 1948, for adoption in the case of names in common use that might be found to be invalid, consequent upon the substitution of the expression "nomenclature binominal" for the expression "nomenclature binaire" in Article 25, to use its Plenary Powers to validate the specific name *pruni* Geoffroy, 1762, as published in the combination *Aphis pruni* and as interpreted by the reference given by Geoffroy to the description published by Réaumur in 1737 (*Mém. Hist. Ins.* 9(3): 317);

- (2) to place on the Official List of Specific Names in Zoology the specific name pruni Geoffroy, 1762, as published in the combination Aphis pruni and as interpreted by the reference to Réaumur (1737) specified by Geoffroy, as proposed, under (1) above, to be validated under the Plenary Powers;
- (3) to place on the Official List of Generic Names in Zoology the generic name Hyalopterus Koch, 1854 (type species, by selection by Passerini (1860) : Aphis pruni Geoffroy, 1762).

II.—THE SUBSEQUENT HISTORY OF THE CASE

2. Registration of the present application : Upon the receipt of Professor Hottes's preliminary inquiry in 1949 the question of the possible use of the Commission's Plenary Powers for the purpose of validating the specific name *pruni* Geoffroy, 1762, as published in the combination *Aphis pruni*, was allotted the Registered Number Z.N.(S.) 428.

3. Publication of the present application : The present application was sent to the printer on 22nd November 1952 but owing to the need during 1953 for concentrating the resources of the Office of the Commission on the preparations for the Session of the Commission to be held at Copenhagen in July of that year and later on the arrangements for the publication of the decisions on nomenclature taken at Copenhagen, it was found necessary temporarily to suspend the publication of Parts of the *Bulletin* of Zoological Nomenclature dealing with applications relating to the status of individual names and similar matters. In consequence, it was not until 11th May 1954 that the present application was published in Part 6 of volume 9 of the *Bulletin* of Zoological Nomenclature (Hottes, 1954, Bull. zool. Nomencl. **9 :** 163–165).

4. Issue of Public Notices : Under the revised procedure prescribed by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, *Bull. zool. Nomencl.* **4** : 51—56), Public Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in the present case was given on 11th May 1954 (a) in Part 6 of volume 9 of the *Bulletin of Zoological Nomenclature* (the Part in which Professor Hottes's applications. In addition, such Notice was given also to certain general zoological serial publications and to a number of entomological serials in Europe and America.

5. No objection received : The issue of the Public Notices specified in the preceding paragraph elicited no objection to the action proposed from any source.

III.—THE DECISION TAKEN BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

6. Issue of Voting Paper V.P.(54)87: On 26th November 1954, a Voting Paper (V.P.(54)87) was issued in which the Members of the Commission were invited to vote either for, or against, "the proposal relating to the specific name *pruni* Geoffroy, 1762, as published in the combination *Aphis pruni*, as set out in Points (1) to (3) on page 165 of volume 9 of the *Bulletin of Zoological Nomenclature*" [i.e. in the Points numbered as above in paragraph

9 of the application reproduced in the first paragraph of the present *Opinion*].

7. Relation to the name "Aphis pruni" Geoffroy, 1762, of the name "Aphis pruni" Scopoli, 1763: When voting on the present application Dr. L. B. Holthuis drew attention to the name Aphis pruni Scopoli, 1763 (Ent. carniol. : 138), which, if Professor Hottes's application for the validation under the Plenary Powers of the name Aphis pruni Geoffroy, 1762, were to be approved by the Commission, would become a junior homonym of Geoffroy's pruni. Dr. Holthuis indicated that, if it could be shown that the nominal species Aphis pruni Geoffroy, 1762, and Aphis pruni Scopoli, represented the same taxonomic species (i.e. the Mealy Plum Aphid), he would prefer that the normal operation of the *Règles* should be followed in this case without resort to the Plenary Powers, but that, if the identity of these nominal species could not be certainly established he would vote in favour of Professor Hottes's proposal for the validation of the name pruni Geoffroy, 1762. Upon the receipt of this communication Mr. Hemming at once asked Professor Hottes to submit a statement on the issue involved. To this inquiry Professor Hottes furnished the following reply :----

Aphis pruni Scopoli, 1763, is a junior homonym of Aphis pruni Geoffroy, 1762, if that name is recognized by the Commission.

Aphis pruni Scopoli, 1763, cannot be identified with certainty :---

- (a) Wilson & Vickery (1918) list it as Phorodon pruni (Scop.).
- (b) J. Davidson (1925:68) makes this a synonym of *Phorodon* humuli Schr.
- (c) Borner & Schilder (1932 : 616) regard *pruni* of Scopoli as a good species and indicate *humuli* of Schrk. as a synonym.
- (d) Parch (1938 : 401) lists *pruni* Scopoli as a synonym of *P. humuli* Schrank.
- (e) Borner (1952 : 104) lists pruni of Scopoli as a synonym of A. cardui L., 1758.

From the literature known to me it would seem to me to be best to place *A. pruni* Scopoli, 1763, as a junior homonym of *A. pruni* Geoffroy, 1762.

In communicating Professor Hottes's letter to Dr. Holthuis, Mr. Hemming observed that it was clear from the information so furnished that the name *Aphis pruni* Scopoli, 1763, was a *nomen dubium* and that its adoption in preference to the name *Aphis pruni* Geoffroy, 1762, would not secure that the specific name *pruni* should be the oldest available name for the Mealy Plum Aphid. Mr. Hemming added that it was his intention, if the Commission, by its vote on Voting Paper V.P.(54)87 were to approve Professor Hottes's proposal for the validation of the name *pruni* Geoffroy, 1762, as published in the combination *Aphis pruni*, to execute a Minute as Secretary to the Commission, directing that the name *pruni* Scopoli, 1763, as published in the same combination, which by such a vote would become a junior primary homonym of *pruni* Geoffroy, 1762, be placed upon the *Official Index of Rejected and Invalid Specific Names in Zoology*.

8. The Prescribed Voting Period : As the foregoing Voting Paper was issued under the Three-Month Rule, the Prescribed Voting Period closed on 26th February 1955.

9. Particulars of the Voting on Voting Paper V.P.(54)87 : At the close of the Prescribed Voting Period, the state of the voting on Voting Paper V.P.(54)87 was as follows :---

(a) Affirmative Votes had been given by the following twenty
 (20) Commissioners (arranged in the order in which Votes were received):

Holthuis; Hering; Lemche; Stoll; Bradley (J.C.); Vokes; Esaki; Bodenheimer; Dymond; Bonnet; Riley; Boschma; Miller; Key; Hankó; do Amaral; Hemming; Kühnelt; Jaczewski; Sylvester-Bradley;

(b) Negative Votes, one (1):

Cabrera;

(c) On Leave of Absence, two (2):

Mertens; Prantl;

(d) Voting Papers not returned :

None.

10. Declaration of Result of Vote : On 27th February 1955, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(54)87, signed a Certificate that the Votes cast were as set out in paragraph 9 above and declaring that the proposal submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.

11. Addition of the name "pruni" Scopoli, 1763, as published in the combination "Aphis pruni" to the "Official Index of Rejected and Invalid Specific Names in Zoology": On 27th February 1955 Mr. Hemming, as Secretary, executed a Minute directing that, as the name *pruni* Scopoli, 1763, as published in the combination *Aphis pruni*, had by the vote taken on Voting Paper V.P.(54)87 become a junior homonym of *pruni* Geoffroy, 1762, as published in the same combination, an entry directing the addition to the *Official Index of Rejected and Invalid Specific Names in Zoology* of the name *pruni*, be made in the Ruling to be prepared embodying the decision taken by the Commission in the present case.

12. Preparation of the Ruling given in the present "Opinion": On 27th February 1956, Mr. Hemming prepared the Ruling given in the present *Opinion* and at the same time signed a Certificate

that the terms of that Ruling were in complete accord with those of the proposal approved by the International Commission in its Vote on Voting Paper V.P.(54)87, as supplemented by the adjustment specified in paragraph 11 above.

13. Original References : The following are the original references for the names placed on *Official Lists* and *Official Indexes* by the Ruling given in the present *Opinion* :—

Hyalopterus Koch, [1854], Die Pflanzenläuse-Aphiden 1:16 pruni, Aphis, Geoffroy, 1762, Hist. abrég. Ins. Paris 2:497 pruni, Aphis, Scopoli, 1763, Ent. carniol.:138

14. The following is the reference for the selection of a type species for the genus *Hyalopterus* Koch, 1854, specified in the Ruling given in the present *Opinion* : Passerini, 1860, *Gli Afidi* (ed. 2) : [27].

15. Family-Group Name Aspect : The application dealt with in the present *Opinion* was submitted to the Commission many years before the establishment of the *Official List of Family-Group Names in Zoology*. It was not found possible to investigate this aspect of this case prior to the submission to the Commission of Voting Paper V.P.(54)87. This question is, however, now being examined on a separate file to which the Registered Number Z.N.(S.) 1113 has been allotted¹.

16. The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Opinion* is accordingly hereby rendered in the name of the said International Commission by the under-signed Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.

¹ A decision on this matter has since been taken by the International Commission and has been embodied in *Direction* 54, which will be published as Part 26 of the present volume.

17. The present *Opinion* shall be known as *Opinion* Three Hundred and Ninety-Seven (397) of the International Commission on Zoological Nomenclature.

DONE in London, this Twenty-Seventh day of February, Nineteen Hundred and Fifty-Six.

Secretary to the International Commission on Zoological Nomenclature

FRANCIS HEMMING

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